

# Product/Service Description Document

## TRACON Arrival and Departure Gate Forecast

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### Part 1 – Mission Connection

- A. Product/Service Description – TRACON Approach and Departure Gate Forecasts will complement the Collaborative Convection Forecast Product by providing greater detail of convective occurrence.
- B. Purpose – TRACON Approach and Departure Gate Forecasts will provide ATCSCC, TMU and TRACON a graphical product for planning air traffic flow safely and efficiently around convection in the TRACON area. The graphic will provide easy to interpret color coded convective forecasts and allow partners to make more informed decision regarding the air traffic flow through the NAS.
- C. Audience – The target audience for this graphical product includes the ATCSCC, ARTCC TMU and TRACON serviced by the CWSU or WFO issuing the product. Other FAA supervisors and controller will have access to the product through the CWSU website.
- D. Presentation Format – The TRACON Gate forecast is available on the web both on the CWSU website and on an AWC website.
- E. Additional Information – For questions about this product:

Point of Contact:

NWS

Cecilia Miner

OS23, SSMC-2, RM 13334

1325 East West Highway

Silver Spring, MD 20910

Phone: 301-713-1726x144

Email: [cecilia.miner@noaa.gov](mailto:cecilia.miner@noaa.gov)

### Part II – Technical Description

- A. Format and Scientific Basis – The TRACON Arrival and Departure Gate forecast will be issued for the probability of convection affecting the sectors associated with arrival and departure gates. Convection is defined as moderate or greater precipitation and tops equal to or exceeding FL250. The following values and colors will be used to indicate probability of convection affecting the sector:

None (0%)
Slight Chance(<30%)
Chance (30%-60%)
Likely (>60%)
Definite (100%)

Guidance from the Storm Prediction Center (SPC) and the National Center for Environmental Prediction (NCEP) which includes NAM, WRF, and RUC model data should be considered. Trends in satellite lightning and radar data will be considered in addition to the mesoscale analysis and the CCFP forecasts as well as CIWS and CoSPA. Collaboration between the CWSU and WFO is required to ensure consistent convective forecasts. Forecasters should strive for consistency between this forecast and other convective forecasts.

- a. Forecasts will be 1-hour intervals for a minimum of 6 hours. Each hour will have a color associated with the probability of convection affecting the sector. See Example 1.
  - b. A forecast of no convection will be issued when no convection is forecast for the entire area. For periods when convection is not forecast for some period of time (e.g. winter, strong ridging), a single forecast can be used which indicates no convection and the slide will be updated when convection is expected. See Example 2.
  - c. The background for the forecast will be generated from the FAA's Performance Data Analysis and Reporting System (PDARS) available at each ARTCC.
- B. Product Availability – The TRACON Approach and Departure Gate Forecast graphic will be available each morning and afternoon. Forecasts will be generated at:
- 0700L
  - 1200L
  - 1800L
- C. Product Generation – The forecast product is generated using Powerpoint or other graphical creation software. Once generated, the CWSU will send the image to the parent WFO via locally established procedures for posting on the web.
- D. Additional Information –
- Product is a man-machine mix.
  - Internet Explorer is used to display
  - No references
  - Forecast for Chicago area is a prototype and will not follow this standard as approved by the FAA

- Product will be experimental for 30 days for public comment in accordance with NWS policy which should be noted on each website

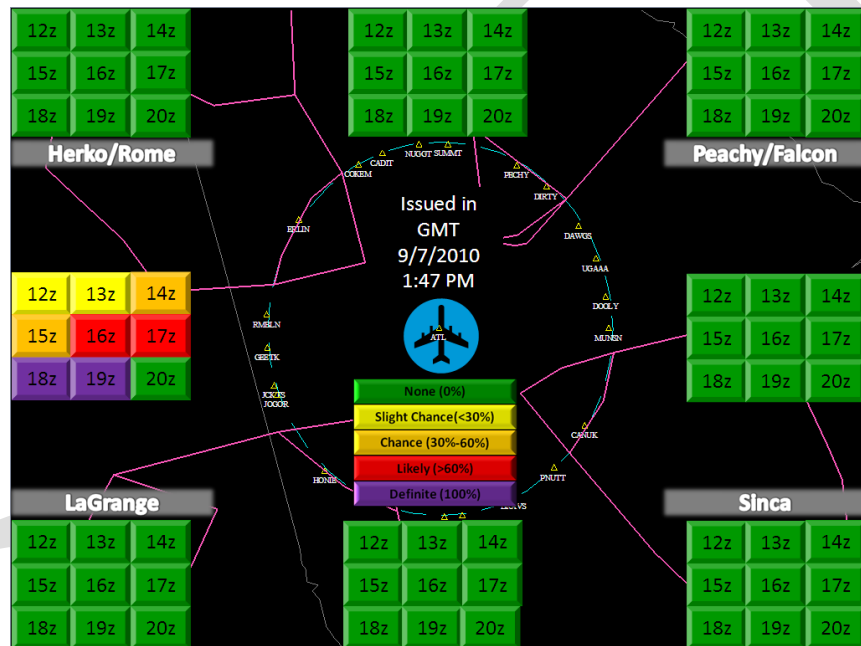
E. Archive –

- The TRACON Gate Forecast will be archived locally in accordance with NOAA/NWS policy either by hardcopy or soft copy

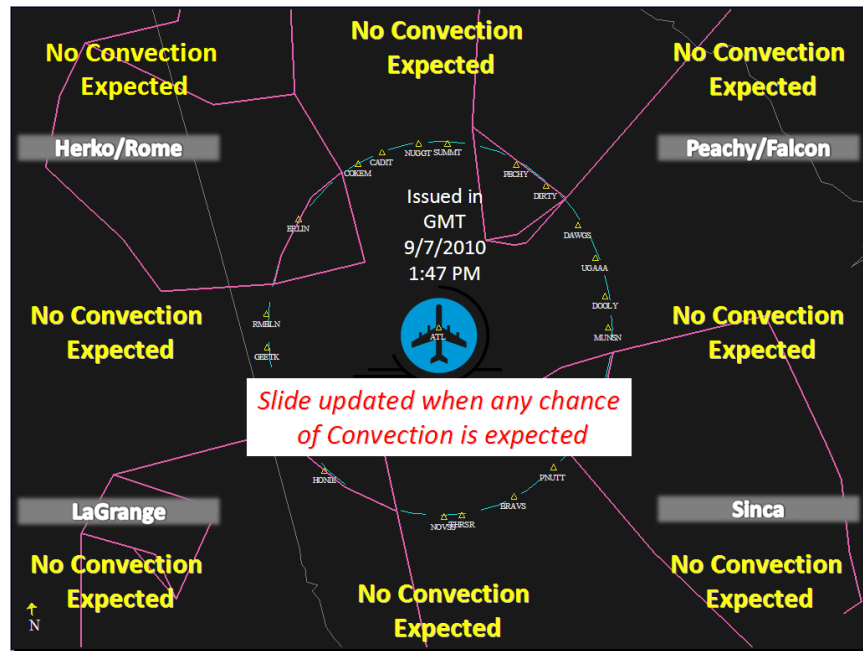
F. Performance Measures –

- Timely Dissemination – product is generated and disseminated as scheduled – 98% of time.
- Format Consistency – product follows standard format – 100% of time.
- Verification of forecast – TBD.

G. Examples –

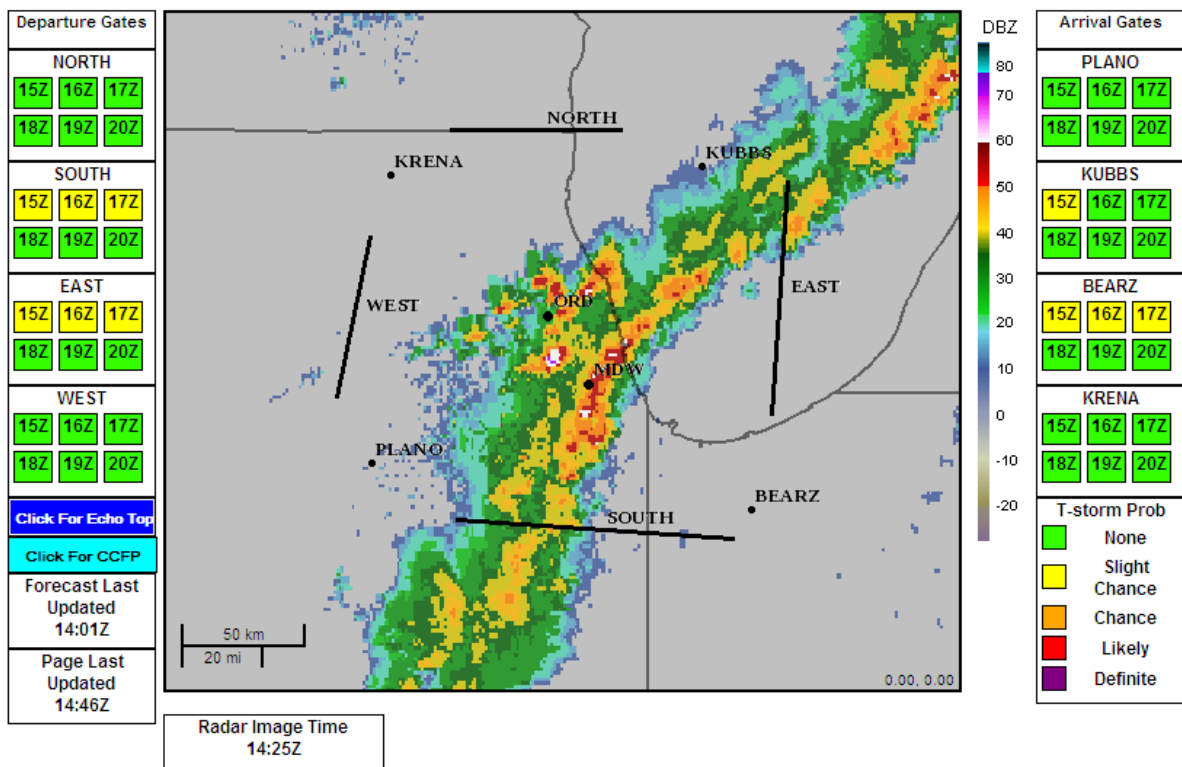


Example 1



Example 2

### Chicago Area Convective TDA



Example 3. Chicago and Denver Prototype